



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,852	09/21/2005	Fredrik Engman	9710-3	9017
30448 7590 11/07/2008 AKERMAN SENTERFITT P.O. BOX 3188 WEST PALM BEACH, FL 33402-3188				
EXAMINER				
MAL HAO'D				
ART UNIT		PAPER NUMBER		
3732				
MAIL DATE		DELIVERY MODE		
11/07/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/517,852

Applicant(s)

ENGMAN, FREDRIK

Examiner

HAO D. MAI

Art Unit

3732

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6,7 and 12-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7 and 12-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/25/2008 has been entered.

Claim Objections

2. Claim 21 are objected to because of the following informalities: claim 21 has an improper preamble. The claim's preamble recites "a prosthetic dental abutment plastics coping", which lacks sufficient antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1, 12-19, and 21, are rejected under 35 U.S.C. 102(b) as being anticipated by Willoughby (5,873,721).**

Regarding claim 1, Willoughby discloses a prosthetic dental abutment coping 22 capable of being used with a prosthetic dental abutment 44 (Fig. 13); the coping is anatomically resemblant to a tooth, e.g. a canine, and is not premounted to an abutment but is selectable and attachable to an abutment by a clinician. As to claims 12-13, the coping comprises lost wax

Art Unit: 3732

material. As to claim 21, note the coping 22 shown in Figures 12-13 having transgingival margin.

Regarding claim 14, Willoughby discloses all the elements as claimed as detailed above with respect to claim 1. As to claim 15, in an alternative embodiment of Figure 12 Willoughby shows the abutment forming a rotatable fit with the coping via threading. As to claims 16-19, Figure 13 shows the abutment 44 and the coping 22 having corresponding means - the abutment having a hexagonal protrusion while the coping having a corresponding hexagonal recess - to form a stabilizing retaining joint. Also note that the abutment is shown to have an annular lip/base to engage with the annular recess of the coping.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-2, 6, 7, 12-19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rassoli et al. (5,662,473) in view of Osorio et al. (2001/0021498 A1)**

Regarding claim 1, Rassoli et al. disclose a dental prosthetic assembly comprising a prosthetic dental abutment coping 11 and a dental abutment 10, the coping is shown not premounted (figure 9). It is noted that in Rassoli et al. the coping is called abutment pattern and the abutment is called base.

Rassoli et al. however are silent to coping 11 being anatomically resemblant to a tooth selected from a group consisting of a molar, a premolar, a canine and an incisor. Nevertheless,

Art Unit: 3732

Rassoli et al. disclose that the coping "may be augmented with dental wax or reduced by grinding or similar machining to achieve a desired shape" (column 3 lines 7-11). It is well known in the prosthodontic field to have a coping resemblant a tooth for cosmetic purposes that the prosthetic coping would appear to be natural. For example, Osorio et al. disclose a coping 12 for use with an abutment 10, the coping 12 being anatomically resemblant to a tooth (Fig. 2A). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the coping of Rassoli et al. of a shape that is resemblant to a tooth for cosmetic purposes that the prosthetic coping would appear to be natural.

As to claims 2 and 6, the coping 11 of Rassoli et al. is capable of being rotatably mounted to an abutment with a 360 degrees of freedom (column 2 lines 64-65). As to claim 7, Rassoli et al. further disclose the coping is capable of forming a snap fit with the abutment (via annular rib 28 and recess 47) and withstand rotational forces (Fig. 9; column 2 lines 65-67). As to claims 12-13, the coping comprises a burn-out plastic, particularly a polycarbonate resin (abstract; column 4 line 44). As to claim 21, note the transgingival margin 40 (best shown in Fig. 7).

Regarding claims 14-19, Rassoli et al. disclose all the elements as claimed as detailed above with respect to claims 1-2, and 6-7; note that the annular rib 28 on the abutment and the recess 47 of the coping form a stabilizing retaining joint between the abutment and the coping. As to claim 20, it would have been obvious to one having ordinary skill in the art to have the abutment provided with the annular recess and the coping with the annular lip as a mere reversal of the parts would involve only routine skill in the art

Response to Arguments

7. Applicant's arguments with respect to the rejected claims have been considered but are moot in view of new ground(s) of rejection.

Art Unit: 3732

Conclusion

8. Any inquiry concerning this communication and earlier communication from the examiner should be directed to HAO D. MAI whose telephone number is 571-272-4709. The examiner can normally be reached on Monday-Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached at 571-272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hao D Mai/

Examiner, Art Unit 3732

/John J Wilson/

Primary Examiner, Art Unit 3732